

What is claimed is:

1. A cardiac rhythm management device, comprising:
 - one or more sensing channels for sensing intrinsic cardiac activity and for sensing evoked responses to paces;
 - 5 a pacing channel for delivering paces to a cardiac chamber;
 - a controller for delivering paces to the cardiac chamber in accordance with a programmed pacing mode, the controller including a memory for program and data storage;
- 10 wherein the controller is programmed to record physiological data from a sensing channel in memory such that older data is overwritten by newer data;
 - wherein the controller is programmed to detect a death event if no intrinsic cardiac activity has been detected in a previous M second interval and if no evoked responses to paces have been detected for the previous N delivered paces; and,
- 15 wherein the controller is programmed to cease recording of physiological data upon detection of a death event.
2. The device of claim 1 further comprising an impedance sensor and wherein the controller is further programmed to detect a death event only if no changes in 20 transthoracic impedance have been detected in a previous L second interval.
3. The device of claim 1 further comprising an accelerometer and wherein the controller is further programmed to detect a death event only if no heart sounds have been detected in a previous K second interval.
- 25 4. The device of claim 1 further comprising an accelerometer and wherein the controller is further programmed to detect a death event only if no activity level has been detected in a previous J second interval.

5. The device of claim 1 further comprising an accelerometer and wherein the controller is further programmed to detect a death event only if no activity level has been detected in a previous J second interval and if the J second interval was preceded by a detection of a sudden increase in activity level.

5

6. The device of claim 1 wherein the controller is further programmed to detect a death event only if a pacing artifact is detected when a pace is delivered.

10 7. The device of claim 1 wherein the controller is further programmed to detect a death event only if an episode of atrial fibrillation precedes the detection of no intrinsic activity and no evoked responses to paces.

15 8. The device of claim 1 wherein the controller is further programmed to detect a death event only if an episode of ventricular fibrillation precedes the detection of no intrinsic activity and no evoked responses to paces.

9. The device of claim 1 wherein the controller is further programmed to cease outputting pacing pulses upon detection of a death event.

20 10. The device of claim 1 wherein the controller is further programmed to communicate the detection of a death event to a remote monitoring unit.

11. A method for operating a cardiac rhythm management device, comprising:
25 sensing intrinsic cardiac activity and evoked responses to paces delivered to a cardiac chamber;

recording physiological data from a sensing channel in a memory such that older data is overwritten by newer data;

30 detecting a death event if no intrinsic cardiac activity has been detected in a previous M second interval and if no evoked responses to paces have been detected for the previous N delivered paces; and,

ceasing the recording of physiological data upon detection of a death event.

12. The method of claim 11 further comprising detecting a death event only if no changes in transthoracic impedance have been detected in a previous L second
5 interval.

13. The method of claim 11 further comprising detecting a death event only if no heart sounds have been detected in a previous K second interval.

10 14. The method of claim 11 further comprising detecting a death event only if no activity level has been detected in a previous J second interval.

15. The method of claim 11 further comprising detecting a death event only if no activity level has been detected in a previous J second interval and if the J second
15 interval was preceded by a detection of a sudden increase in activity level.

16. The method of claim 11 further comprising detecting a death event only if a pacing artifact is detected when a pace is delivered.

20 17. The method of claim 11 further comprising detecting a death event only if an episode of atrial fibrillation precedes the detection of no intrinsic activity and no evoked responses to paces.

25 18. The method of claim 11 further comprising detecting a death event only if an episode of ventricular fibrillation precedes the detection of no intrinsic activity and no evoked responses to paces.

19. The method of claim 11 further comprising ceasing the delivery of pacing pulses upon detection of a death event.

20. The method of claim 11 further comprising communicating the detection of a death event to a remote monitoring unit.
21. The method of claim 20 further comprising triggering an alarm in the remote monitoring unit which alerts appropriate personnel over a network connection.
5
22. The method of claim 20 further comprising ceasing the delivery of pacing pulses upon receipt of a command from the remote monitoring unit upon detection of a death event.